

Moreover, Applicant is strongly of the opinion that a person of ordinary skill in the art would be fully able to make and use the invention in view of the disclosure and teachings of the present application. This opinion is supported by the fact that the corresponding European patent application has matured into a patent (EP1170037B1) in 2004. A copy of that patent is enclosed for your review.

In summary, Applicant is of the opinion that the present application clearly and adequately describes the basic principle of the invention and the operation of the disclosed embodiment. Referring to paragraph 3 of the Office Action, it is clear that a person of ordinary skill in the art is aware of various means to recognize different signal strengths because those means and the underlying principles have been known for many years as shown by the previously filed declaration of *Eero Koivula*. Specifically, Applicant is strongly of the opinion that a person of ordinary skill in the art would be fully aware of how modification circuitry 33 and microprocessor 34 are used in signal processing. It should be noted that modification circuitry 33 and microprocessor 34 are not used to modify the heart rate monitor as stated by the Examiner, but instead are used to process a signal read from the receiver measurement point as described in Paragraph 0012 of the application; i.e., to define the distance between the transmitter and the receiver on the basis of signal strength data of the received signal.

Regarding the rejection of Claims 3-5, 10, 12-13, 15, 17-19 and 20 as being obvious over *Hurt* in view of *Friedman*, *Hurt* describes a treadmill in which a heart rate monitor displays the user's heart rate to help the user maintain his or her heart rate within a desired range. Moreover, *Hurt* suggests that the computer controller of the treadmill could be designed so as to be responsive to signals from the heart rate monitor to automatically adjust the incline or speed of the treadmill to increase or decrease the intensity of the exercise. In this connection please see *Hurt*, column 12,

lines 27-42. Importantly though, *Hurt* says nothing about the use of signals obtained from the heart rate monitor for determining the location of the user on the treadmill.

PCT document WO 98/36400 (*Friedman*) describes on page 15 the use of proximity sensors to detect periodic motion of a portion of a treadmill user's body such as a leg. Data from the sensor is then processed to determine the rate of that periodic motion, which the inventor contends is indicative of the level of exertion of the treadmill user. In contrast the present invention uses field strength information, which is present as a secondary feature in the digital output signal of commercially available heart rate monitors to detect the user's position on the treadmill and resultant control signals. Nothing in the prior art suggests that such information can be used for location purposes as disclosed in the present application. The combination of *Hurt* and *Friedman* leads to something else than the present invention, i.e. to a system using a heart rate monitor and proximity sensors. It should be emphasized, that in the present invention no proximity sensors are employed for position and control information.

The Examiner also rejected Claims 3, 5, 10, 12, 13, 15, 17-19 and 20 as being obvious over *Huish* or *Trulaske* in view of *Shyu*. *Shyu* discloses means for detecting the position of a user on a treadmill including a transmitter for transmitting an ultrasonic wave toward the user and a receiver for detecting the wave when it is reflected from the chest of the user. Nowhere does *Shyu* disclose or suggest means for detecting field strength of an electromagnetic wave transmitted from a transmitter attachable to the user, means for detecting the field strength of the transmitted wave, or means for producing a control signal responsive to the field strength. Accordingly, Applicant continues to contend that the invention according to independent Claims 3, 10, 17 and 20 would not be obvious in view of any combination of the teachings of *Huish*, *Trulaske* and/or *Shyu*.

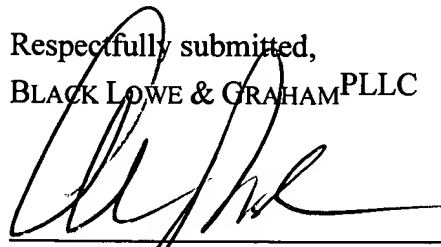
Finally, the Examiner has rejected Claims 3, 5, 10, 12, 13, 15, 17-19 and 20 as being obvious over *Potash et al.* in view of *Huish* or *Trulaske*. As previously discussed, *Potash* discloses a treadmill in which information from an ultrasonic transmitter/receiver mounted to the treadmill frame is used to calculate the position of the user on the treadmill. It also includes means responsive to this position information for varying the speed of the treadmill in order to maintain the user in a predetermined position on the belt. Applicant again argues that there are no teachings in *Potash* and, as stated above, in *Huish* or *Trulaske*, that would disclose or suggest a treadmill as now claimed according to independent Claims 3, 10, 17 and 20.

In summary, the Applicant believes that none of the references cited by the Examiner, either singularly or in combination, disclose or suggest the invention now claimed and that the invention is patentable over all prior art cited by the Examiner or known to the Applicant. Accordingly, the Applicant requests that the Examiner re-examine this application in view of the above amendments and remarks, withdraw all rejections and objections of record, and allow each of the claims now proposed.

In the event additional fees are due as a result of this amendment, payment for those fees has been enclosed in the form of a check. Should further payment be required to cover such fees you are hereby authorized to charge such payment to Deposit Account No. 501050.

DATED this 30th day of June 2008.

Respectfully submitted,  
BLACK LOWE & GRAHAM<sup>PLLC</sup>



H. Albert Richardson, Esq.  
Registration No. 27,701

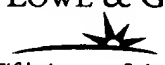
HAR/elb  
Enclosure: EP1170037B1

25315

CUSTOMER NUMBER

5  
TU2X-2-1001ROA7

BLACK LOWE & GRAHAM<sup>PLLC</sup>



701 Fifth Avenue, Suite 4800  
Seattle, Washington 98104  
206.381.3300 • F: 206.381.3301



CERTIFICATE OF MAILING

I hereby certify that this correspondence (together with all attachments and enclosures) is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: June 30, 2008

Erin L. Barr  
Signature

Erin L. Barr


Printed or Typed Name

25315

CUSTOMER NUMBER

6  
TU2X-2-1001ROA7

BLACK LOWE & GRAHAM<sup>PLLC</sup>

  
701 Fifth Avenue, Suite 4800  
Seattle, Washington 98104  
206.381.3300 • F: 206.381.3301